

CLAIMS

What is claimed is:

1. A pavement ramp edge maker comprising:

a compaction member have a compaction surface for partially compacting paving material received thereby into a ramp; and

a coupling device for coupling the compaction member to a paving machine,

wherein the compaction surface is set at an edge angle such that a final angle of the ramp after compaction is less than or equal to approximately 45° relative to a surface upon which the ramp is formed.

2. The pavement edge maker of claim 1, wherein the coupling device includes a spring bias and vertical adjustment system including:

a mounting plate for mounting to a fixed structure of the paving machine;

a threaded rod slidably coupled to the mounting plate and threadably coupled to the compaction member; and

a spring bias for biasing the compaction member against upward movement, the spring bias including a spring mounted about the threaded rod and between the mounting plate and a bias adjustment member that is rigidly coupled to the threaded rod.

3. The pavement edge maker of claim 2, a distance between the mounting plate and the compaction member can be adjusted by turning of the threaded rod.

4. The pavement edge maker of claim 2, wherein a bias required to move the compaction member upwardly relative to the mounting plate can be adjusted by adjusting the position of the bias adjustment member along the threaded rod.
5. The pavement ramp edge maker of claim 1, wherein the compaction member further includes a paving material directing member for directing paving material toward the compaction surface.
6. The pavement ramp edge maker of claim 5, wherein the paving material directing member is a plate that is set at an angle of approximately 45° relative to the end plate.
7. The pavement ramp edge maker of claim 5, wherein the compaction member further includes a pair of support members coupled to the compaction surface and the paving material directing member.
8. The pavement edge maker of claim 7, wherein one of the support members extends in a direction of travel and includes a rounded leading edge adapted to engage the surface.
9. The pavement ramp edge maker of claim 5, further comprising a trailing directing member extending substantially in a direction of travel from a trailing edge of the paving material directing member.
10. The pavement ramp edge maker of claim 1, wherein the compaction member further includes

a trailing compaction surface extending substantially in a direction of travel from a trailing edge of the compaction surface.

11. The pavement ramp edge maker of claim 10, wherein the trailing edge between the compaction surface and the trailing compaction surface is rounded.

12. The pavement ramp edge maker of claim 1, wherein the compaction surface is set at a compaction angle relative to a direction of travel that is less than approximately 45° .

13. The pavement ramp edge maker of claim 13, wherein the edge angle and the compaction angle are substantially identical.

14. The pavement ramp edge maker of claim 13, wherein the edge angle and the compaction angle are approximately 35° .

15. A paving machine comprising:

- a screed for distributing paving material during paving;
- a vertically self-adjusting end gate coupled to the screed;
- and
- a pavement ramp edge maker including:
 - a compaction member including a compaction surface for partially compacting paving material received thereby to form a ramp; and
 - a coupling device for coupling the compaction member to the paving machine,

wherein the compaction surface is set at an edge angle such that a final angle of paving material after compaction is less than or equal to approximately 45° relative to a surface upon which the ramp is formed.

16. The paving machine of claim 16, wherein the edge angle is approximately 35° relative to horizontal.

17. The paving machine of claim 16, wherein the coupling device includes a spring bias and vertical adjustment system including:

- a mounting plate for mounting to a fixed structure of the paving machine;
- a threaded rod slidably coupled to the mounting plate and threadably coupled to the compaction member; and
- a spring bias for biasing the compaction member against upward movement, the spring bias including a spring mounted about the threaded rod and between the mounting plate and a

bias adjustment member that is threadably coupled to the threaded rod.

18. The paving machine of claim 19, a distance between the mounting plate and the compaction member can be adjusted by turning of the threaded rod.

19. The paving machine of claim 19, wherein a bias required to move the compaction member upwardly relative to the mounting plate can be adjusted by adjusting the position of the bias adjustment member along the threaded rod.

20. The paving machine of claim 16, wherein the compaction member further includes a paving material directing member for directing paving material toward the compaction surface.

21. The paving machine of claim 22, further comprising a trailing directing member extending substantially in a direction of travel from a trailing edge of the paving material directing member.

22. The paving machine of claim 16, wherein the compaction member further includes a trailing compaction surface extending substantially in a direction of travel from a trailing edge of the compaction surface.